

**Abstract**

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A flight data recorder designed for small aircraft captures various onboard flight data in real-time and stores it in non-volatile memory. Recorded data includes aircraft's instantaneous position, altitude, attitude, engine RPM, G forces, flap position, cockpit voice and others. These data are obtained from various sensors which are integrated into the recorder. At the end of a flight the recorded data is downloaded into a computer using a wireless communications data transceiver also integrated into the recorder. It is an inexpensive system that does not require interfacing to any of the aircraft flight instruments since it has built-in sensors for these functions. It does not require removal or attaching any equipment to be able to download data. In addition to accident investigation, applications include training, preventive maintenance and asset monitoring.

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AUG 09 2002

GROUP 3600